Adriano Lopes

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Associate Researcher ISTAR-IUL - Information Sciences, Technologies and Architecture Research Center (ISTA) [Software Systems Engineering]	

Contacts

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Curriculum

Adriano Lopes is Invited Lecturer at Iscte-IUL / Department of Sciences and Information Technologies, and Associate Researcher at ISTAR-IUL.

He holds a PhD in Computer Science from the University of Leeds, UK, and a BSc in Electrical Engineering - Major in Informatics and MSc in Computer Science, both from the University of Coimbra, Portugal.

Previously, he was Assistant Professor at Nova University of Lisbon, in the Faculty of Science and Technology/Department of Informatics (FST/DI) and at University of Coimbra, in the Faculty of Science and Technology/Department of Mathematics, Portugal. Alongside teaching and research activities, he held various academic management positions in these institutions. He was also researcher at the research center CITI, hosted by FST/DI.

In the industry, he held management positions in a IT company.

Regarding teaching activities, he taught computer science subjects like Programming, Algorithms and Data Structures, Computer Graphics, User Interfaces, Multimedia, Theory of Computation and Software Engineering.

More recently, he has been teaching Big Data and Data Science related topics, namely Big Data Algorithms and Big Data Processing and Modelling.

Regarding research projects, he has participated in various projects funded by Portuguese FCT, as well as research projects with EU funding. Currently he is participating in the RESETTING (Relauching European smart sustainable tourism models through digitalization and innovative technologies) project funded by EU.

Research Interests

Visual Analytics
Visual Analytics
Big Data
Big Data
Software Engineering
Software Engineering
Visualization and Computer Graphics
Visualization and Computer Graphics

Academic Qualifications

University/Institution	Type	Degree	Period
Universidade Técnica de Lisboa, ISEG	Post-graduation	Análise Financeira	2013
University of Leeds, School of Computer Studies (UK)	PhD	Computer Studies	1999
Universidade de Coimbra, FCT	M.Sc.	Ciências da Computação	1993
Universidade de Coimbra, FCT	Licenciate	Engenharia Electrotécnica - Ramo de Informática	1986

Teaching Activities

Teaching Year	Sem.	Course Name	Degree(s)	Coord.
2024/2025	2º	Algorithms for Big Data	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2024/2025	2º	Big Data Processing	Bachelor Degree in Data Science (PL); Bachelor Degree in Data Science;	Yes
2024/2025	1º	Software Engineering	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2023/2024	2º	Algorithms for Big Data	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2023/2024	2º	Big Data Processing	Bachelor Degree in Data Science (PL); Bachelor Degree in Data Science;	Yes

2023/2024	1º	Software Engineering	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2022/2023	2º	Algorithms for Big Data	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2022/2023	2º	Big Data Processing	Bachelor Degree in Data Science (PL); Bachelor Degree in Data Science;	Yes
2022/2023	2º	Big Data Processing and Modeling	Master Degree in Data Science;	Yes
2021/2022	2º	Algorithms for Big Data	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2021/2022	2º	Big Data Processing	Bachelor Degree in Data Science (PL); Bachelor Degree in Data Science;	Yes
2021/2022	2º	Big Data Processing and Modeling	Master Degree in Data Science;	Yes
2021/2022	1º	Software Engineering	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2020/2021	2º	Algorithms for Big Data	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2020/2021	2º	Big Data Processing	Bachelor Degree in Data Science (PL); Bachelor Degree in Data Science;	Yes
2020/2021	2º	Big Data Processing and Modeling	Master Degree in Data Science;	Yes
2020/2021	1º	Software Engineering	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2019/2020	2º	Collaborative Digital Processes		No
2019/2020	2º	Big Data Visualization		Yes
2019/2020	2º	Information System Design and Development	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management;	No

2019/2020	1º	Software Engineering I		No
2018/2019	2º	Information System Design and Development	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management;	No
2018/2019	1º	Big Data Visualization		Yes
2018/2019	1º	Software Engineering I		No
2017/2018	2º	Big Data Visualization		Yes
2017/2018	2º	Information System Design and Development	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management;	No
2017/2018	2º	Information System Design and Development	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management;	No
2017/2018	2º	Information System Design and Development	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management;	No
2017/2018	1º	Software Engineering I		No

Supervisions

• M.Sc. Dissertations
- Concluded

	Student Name	Title/Topic	Language	Institution	Concluding Year
1	André Guilherme Ramalho Garcia	Tourism Flow Forecasting for Inbound European Travel	English	ISCTE-IUL	2023
2	Nuno Miguel de Castro de Amorim Oliveira Dias	Forecasting Models for Portugal's Inbound Tourism	English	ISCTE-IUL	2023

3	Gonçalo Monteiro Cruz	Network anomalies detection via event analysis and correlation by a smart system.	English	ISCTE-IUL	2022
4	José Maria Guerreiro Ferreira Félix do Sacramento	Sentiment analysis in the stock market based on Twitter data	English	ISCTE-IUL	2021
5	Rogério Coimbra Henriques Lopes Dias	Consumer Attitudes towards online mobile advertising formats	English	ISCTE-IUL	2020
6	Pedro Miguel Tenreiro Cardoso	--	English	Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia	2013
7	Pedro Infante Gonçalves Boavida	--	English	Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia	2009
8	Paulo Alexandre Cabral de Castro	--	English	Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia	2009
9	Sérgio Miguel Rodrigues Lopes	--	English	Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia	2007
10	Nuno Carlos Sousa Rodrigues	--	Portuguese	Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia	2006

Total Citations

Web of Science®	128
Scopus	188

Publications

• Scientific Journals
- Scientific journal paper

1	Lopes, A., Oliveira, J., Sebastião, P., Sousa, M. & Vieira, P. (2021). A modular web-based software solution for mobile networks planning, operation and optimization. Applied Sciences. 11 (16) - Times Cited Scopus: 1

2	Brandão, F., Paio, A. & Lopes, A. (2020). Triangulation algorithms for generating as-Is floor plans. Nexus Network Journal. 22 (3), 683-700 - Times Cited Scopus: 1 - Times Cited Google Scholar: 1
3	Preto, B., Birra, F., Lopes, A. & Medeiros, P. (2013). Object identification in binary tomographic images using GPGPUs. International Journal of Creative Interfaces and Computer Graphics. 4 (2), 40-56 - Times Cited Google Scholar: 8
4	Castro, P. & Lopes, A. (2010). Magnet Mail: a visualization system for emails. International Journal of Creative Interfaces and Computer Graphics. 1 (2), 29-39
5	Lopes, A. & Brodlie, K. (2003). Improving the robustness and accuracy of the marching cubes algorithm for isosurfacing. IEEE Transactions on Visualization and Computer Graphics. 9 (1), 16-29 - Times Cited Web of Science®: 128 - Times Cited Scopus: 149 - Times Cited Google Scholar: 284

- Scientific journal editor

1	Santos, M. Prospero dos, Sousa, A. A. & Lopes, A. (2006). VIRtual. Eurographics Portuguese Chapter.

• Books and Book Chapters
- Book chapter

1	Brodlie, K., Osorio, R. A. & Lopes, A. (2012). A review of uncertainty in data visualization. In John Dill, Rae Earnshaw, David Kasik, John Vince, Pak Chung Wong (Ed.), Expanding the frontiers of visual analytics and visualization. (pp. 81-109). London: Springer. - Times Cited Google Scholar: 283
2	Jo Wood, Sabine Kirschenbauer, Jürgen Döllner, Lopes, A. & Lars Bodum (2005). Using 3D in Visualization. In Exploring Geovisualization. (pp. 293-312).: Elsevier. - Times Cited Scopus: 30 - Times Cited Google Scholar: 76
3	Lopes, A. & Ken Brodlie (2005). Interactive Approaches to Contouring and Isosurfacing for Geovisualization. In Exploring Geovisualization. (pp. 345-361).: Elsevier. - Times Cited Scopus: 6 - Times Cited Google Scholar: 14
4	Lopes, A. & Ken Brodlie (1998). Accuracy in 3D Particle Tracing. In Hans-Christian Hege; Konrad Polthier; (Ed.), Mathematical Visualization. (pp. 329-341). Berlin, Heidelberg: Springer Berlin Heidelberg. - Times Cited Google Scholar: 33

• Conferences/Workshops and Talks
- Publication in conference proceedings

1	Brito e Abreu, F., Marinheiro, R. N., Boavida-Portugal, I., Lopes, A., Mestre Santos, T., Sampaio de Almeida, D....Simões, R. (2024). A digital transformation approach to scaffold tourism crowding management: pre-factum, on-factum, and post-factum. In 2024 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON). (pp. 586-591). Chiang-mai, Thailand: IEEE.

2	Brandão, F., Paio, A. & Lopes, A. (2019). Interactive algorithm for generating accurate as-built plans by building owners. In Sousa, JP, Henriques, GC and Xavier, JP (Ed.), eCAADe SIGraDI 2019: Architecture in the Age of the 4th Industrial Revolution. (pp. 69-78). Porto: ECAADE-EDUCATION & RESEARCH COMPUTER AIDED ARCHITECTURAL DESIGN EUROPE. - Times Cited Google Scholar: 1
3	Castro, P. & Lopes, A. (2009). Magnet Mail: A Visualization System for Email Information Retrieval. In Butz, Andreas and Fisher, Brian and Christie, Marc and Krüger, Antonio and Olivier, Patrick and Therón, Roberto (Ed.), Smart Graphics: 10th International Symposium, SG 2009. (pp. 213-222). Salamanca: Springer Berlin Heidelberg. - Times Cited Scopus: 1 - Times Cited Google Scholar: 4
4	Lopes, A. & Ken Brodlie (1998). Accuracy in contour drawing. In Eurographics UK Chapter. (pp. 301-311). Leeds - Times Cited Google Scholar: 17

- Conference proceedings editor

1	Lopes, A. (2005). 13th Eurographics Portuguese Chapter Conference. Vila Real.

- Talk

1	Simões, R., Brito e Abreu, F. & Lopes, A. (2023). Plataforma para visualização geo-temporal de apinhamento turístico. XIV Congresso da Geografia Portuguesa.
2	Brandão, Filipe J.S., Paio, A. & Lopes, A. (2019). Interactive algorithm for generating accurate as-built plans by building owners. eCAADe/SIGRADI 2019 - Architecture in the Age of the 4th Industrial Revolution .

Research Projects

Project Title	Role in Project	Partners	Period
Relaunching European smart and SustainablE Tourism models Through digitalization and INnovative technoloGies	Researcher	ISTAR-IUL, BRU-Iscte, IT-Iscte, EURECAT - Leader (Spain), TICSUD - (Spain), FEHT-Turism - (Spain), - - (Italy), ANHER - (Greece), Albanian Trip - (Albania), AUDAX - (Portugal)	2022 - 2024

Organization/Coordination of Events

Type of Organization/Coordination	Event Title	Organizer	Year
Member of scientific event's organizing committee	EUROVIS 2006 - Eurographics / IEEE Symposium on Visualization - VGTC	Eurographics / IEEE	2006
Member of scientific event's organizing committee	Eurographics UK 1998 Conference	Eurographics UK Chapter	1998